

(3) The vessel either does not have more than one deck above the bulkhead deck or, if without a bulkhead deck, does not have more than one deck above the deck from which freeboard is measured excluding a pilot house; and

(4) The vessel's stability has not been questioned by the cognizant Officer in Charge, Marine Inspection (OCMI).

(d) In lieu of the requirements in paragraphs (a) through (c) of this section, a vessel may meet another stability standard approved by the Commanding Officer, Marine Safety Center.

[USCG-2007-0030, 75 FR 78088, Dec. 14, 2010]

§ 178.320 Intact stability requirements—non-sailing vessels.

(a) As permitted by §178.310(c) of this part, the following vessels may undergo the simplified stability proof test detailed in §178.330 of this part, in the presence of a Coast Guard marine inspector, if they do not have tumblehome at the deck, measured amidships, that exceeds 2 percent of the beam:

(1) Monohull vessels; and

(2) Flush deck catamaran vessels which are not pontoon vessels and carry not more than 49 passengers.

(b) As permitted by §178.310(c) of this part, a self-propelled pontoon vessel may undergo the pontoon simplified stability proof test detailed in §178.340 of this part, in the presence of a Coast Guard marine inspector, if it satisfies all of the following requirements:

(1) The vessel carries not more than 49 passengers and does not make international voyages;

(2) The vessel operates on Protected Waters only;

(3) The vessel is constructed with only one deck;

(4) The buoyant hull volume consists of two symmetric, fully enclosed hulls;

(5) The cross section of each hull is circular or of wall-sided construction without tumblehome, and constant for at least 90 percent of the length of the hull;

(6) The hulls contain no machinery or tanks;

(7) The portion of the deck accessible to passengers does not extend beyond—

(i) The outboard edge of the hulls, and

(ii) The forward or the aft end of the hulls;

(8) There is no deck more than 0.15 meters (6 inches) above any point on any of the buoyant hulls;

(9) The distance between the centerlines of the hulls is not less than 1.83 meters (6 feet); and

(10) Each hull has a beam or diameter, as applicable, of not less than 0.61 meters (2 feet).

(c) For a vessel that carries not more than 49 passengers, carries no deck cargo, and is otherwise eligible to undergo the simplified stability proof test detailed in §178.330 or §178.340 of this part, the authority issuing the stability letter may—

(1) Dispense with the requirements of the simplified stability proof test in §178.330 or §178.340 of this part when the vessel's stability can be adequately assessed by alternate means giving due consideration to each item that impacts a vessel's stability characteristics which include, but are not limited to, the form, arrangement, construction, number of decks, route, and operating restrictions of the vessel; or

(2) Authorize a change in the requirements of the simplified stability proof test in either §178.330 or §178.340 of this part, when necessary to adequately assess the vessel's stability.

[USCG-2007-0030, 75 FR 78088, Dec. 14, 2010]

§ 178.325 Intact stability requirements—monohull sailing vessels.

(a) As permitted by §178.310(c) of this part, a monohull sailing vessel may demonstrate compliance with paragraphs (b) or (c) of this section if it satisfies all of the following requirements:

(1) It does not operate on exposed waters;

(2) It only operates during the daylight hours;

(3) It is of the usual type, rig, and hull form, excluding vessels without a weathertight deck, such as open boats;

(4) It carries not more than 49 passengers;

(5) It is not a sailing school vessel that carries a combined total of six or more sailing school students and instructors;

(6) Its minimum downflooding angle is greater than 60 degrees;

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(7) It does not have a cockpit greater than 20 percent of the Length Over Deck; and

(8) If equipped with a cockpit and operating on Partially Protected Waters, the cockpit must be self-bailing.

(b) The vessel may undergo the simplified stability proof test detailed in § 178.330 of this part, in the presence of a Coast Guard marine inspector, if it does not have tumblehome at the deck, measured amidships, that exceeds 2 percent of the beam.

(c) The cognizant Officer in Charge, Marine Inspection (OCMI) may perform operational tests to determine whether the vessel has adequate stability and satisfactory handling characteristics under sail for protected waters or partially protected waters.

(d) The Commanding Officer, Marine Safety Center, may prescribe additional or different stability requirements for a broad, shallow draft vessel with little or no ballast outside the hull.

[USCG–2007–0030, 75 FR 78088, Dec. 14, 2010]

§ 178.330 Simplified stability proof test (SST).

(a) A vessel must be in the condition specified in this paragraph when a simplified stability proof test is performed.

(1) The construction of the vessel is complete in all respects.

(2) Ballast, if necessary, is in compliance with § 178.510 of this part and is on board and in place.

(3) Each fuel and water tank is approximately three-quarters full. Any sewage tank should be either empty or full.

(4) A weight equal to the total weight of all passengers, crew, and variable loads permitted on the vessel is on board and distributed so as to provide normal operating trim and to simulate the vertical center of gravity, causing the least stable condition that is likely to occur in service. The assumed weight per person of passengers and crew must be representative of the passengers and crew on board the vessel while engaged in the service intended. Unless the cognizant Officer in Charge, Marine Inspection (OCMI) permits or requires the use of other values in writ-

ing, weight and vertical center of gravity are to be assumed as follows:

(i) The weight of primary lifesaving equipment should be simulated at its normal location, if not on board at the time of the test.

(ii) The assumed weight per person is determined as provided by § 170.090 of this chapter.

(iii) The weight and associated vertical center of gravity of variable loads must be included as appropriate for the service intended and documented in the stability information required by subpart B of this part.

(iv) The vertical center for the total test weight must be at least 30 inches (760 millimeters) above the deck for seated passengers, and at least 39 inches (1.0 meter) above the deck for standing passengers.

(v) If the vessel carries passengers on diving excursions, the total weight of diving gear must be included in the loaded condition and placed in its stowed position. Not less than 80 pounds (36.3 kilograms) should be assumed for each person for whom diving gear is provided.

(vi) On vessels having one upper deck available to passengers above the main deck, the weight distribution must not be less severe than the following:

Total Test Weight (W) = _____
Passenger Capacity of Upper Deck:

Weight on Upper Deck = (Number of Passengers on Upper Deck) * (Wt per Passenger) * 1.33

Weight on Main Deck = Total Test Weight – Weight on Upper Deck.

(5) All non-return closures on cockpit scuppers or on weather deck drains must be kept open during the test.

(b) A vessel must not exceed the limitations in paragraph (d) of this section, when subjected to the greater of the following heeling moments:

$M_p = (W) (B_p)/6$; or

$M_w = (P) (A) (H)$

Where:

M_p = passenger heeling moment in foot-pounds (kilogram-meters);

M_w = Wind heeling moment in foot-pounds (kilogram-meters)

W = the total weight of persons other than required crew, plus the personal effects of those persons expected to be carried while aboard the vessel (total test weight) in pounds (meters);